

CHEKALYUK, E.B.

Determination of the physical parameters of a reservoir in
a nonstationary gas cut fluid flow. Nauch.-tekhn. zhurn.
dob. nefti no.19:60-64 '63.

Determination of reservoir parameters on the basis of well
test data obtained by a tester. Ibid.:64-70 (MIRA 17:8)

1. Ukrainskiy nauchno-issledovatel'skiy gornorudnyy institut.

CHEKALYUK, E.B.; KOVAL'CHUK, M.R.

"Can the saturation pressure determine the time of formation of oil pools?" concerning published works of V.O. Kraiuskhina.
Geol. zhur. 24 no.5:105-106 '64. (MIRA 17:12)

1. Ukrainskiy nauchno-issledovatel'skiy gornorudnyy institut.

TSISAT, Yu.S.; CHEKALYUK, D.B.

Experimental check of change in the gas factor after well shutdown.
Nauch.-tekhn. sbor. po dob. nefiti no.22:26-33 '64. (MIRA 17:9)

1. Ukrainskiy nauchno-issledovatel'skiy geologor: zvedochnyy institut.

CHEKALYUK, E.B.

General method for determining the physical reservoir parameters
from measurements of bottom hole pressures and inflows. Neft.
khoz. 42 no.2:36-40 F '64. (MIRA 17:3)

ZAV'YALOV, V.M.; MUROMTSEV, A.S.; PALIY, A.M.; CHEKALYUK, E.B.; CHERPAK, S.Ye.

Possibilities for increasing the efficiency of prospecting in the eastern part of the Ukrainian oil- and gas-bearing basin. Geol. nefti i gaza 9 no.2:20-24 F '65.

(MIRA 18:4)

1. IGIGGI AN UkrSSR, Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov UkrSSR, Ukrainskiy nauchno-issledovatel'skiy geologorazvedochnyy institut i trest Poltavaneftgazrazvedka.

CHEKALYUK, E.B.

Thermolift. Neft. 1 gaz. prom. no.2:31-33 Ap-Je '65.

(MIRA 18:6)

CHEKALYUK, Emmanuil Bogdanovich

[Thermodynamics of petroliferous layers] Termodinamika
neftianogo plasta. Moskva, Nedra, 1965. 237 p.
(MIRA 18:8)

CHEKALYUK, E.B.

Controlling gas losses during the investigation of fields.
Trudy UkrNIGRI no.7:102-108 '63.

Universal method of determining the physical parameters
of a layer based on field data. Ibid.:150-155.

Efficient oil withdrawals from wells of the new fields
in the Dnieper-Donets Lowland. Ibid.:171-175.

Theory and calculation of a throttle well bottom heater.
Ibid.:266-277.

(MIRA 19:1)

CHEKALYUK, E. F.

(4)
Heat treatment of exhausted petroleum deposits. II.
E. F. Chekalyuk, K. A. Orany, E. A. Stenanchikov,
and A. N. Snarskii. *Neftyanoe Khoz.* 32, No. 2, 83-8
(1954); cf. preceding abstr.—The earlier investigation of
thermal treatment of deposits failed to give valuable
results because the rate of heat injection and the scale of
expts. were inadequate, and the heat value of the injection
agent was too low. When hot water at 200° or satd. steam
at 80 atm. is used, the rate of heat supply is increased,
which successfully solves the problem of recovering the
residual petroleum from the deposit. W. M. Sternberg

1/27/59
JHP

CHEKALYUK, E.G.

Temperature field of oil sands in connection with hot water
injection into a well. Neft.khoz. 33 no.4:39-43 Ap '55.

(MIRA 8:7)

(Oil field flooding)

VORONETSKIY, M.K.; GNATYUK, A.M.; KACHMAR, Yu.D.; KOVALEVICH, V.N.; PETRASH, I.N.;
CHEKALYUK, S.B.

Automated fire platoon. Mash. 1. noft. obor. no.5:24-26 165.
(MIRA 18:6)

1. Neftepromyslovoye upravleniye "Dolianeft'", Dolina.

CHEKALYUK, Ye., kand.tekhn.nauk (L'vov)

In the storehouse of the earth. Nauka i zhyttia 12 no.6:10-11 Je '62.
(MIRA 15:7)

(Oil reservoir engineering)

CHEKAN, A.P.

Leather and shoe industries of White Russian S.S.R. in the sixth
five-year plan. Leg. prem. 16 no.1:4-5 Ja '56. (MLRA 9:6)

1. Nachal'nik Belkoshobuv'prama.
(White Russia--Leather industry)(White Russia--Shoe industry)

ARDAB'YEVSKIY, A.I.; CHEKAN, A.V.

Optical masers. Izv. vys. ucheb. zav.; radiotekh. 6 no.4:
327-356 JI-Ag '63. (MIRA 16:11)

CHEKAN, Lev Ivanovich

DECEASED

1964

1963

Distilling
Beverages

CHEKAN, L.I.; KOROCHKINA, O.I.; STORCHEVAYA, T.R.

Improving the keeping quality of soft drinks. Trudy TSentr.
nauch.-issl. inst. piv., bezalk. i vin. prom. no.10:97-109
'63. (MIRA 17:8)

KUSHNIROV, V.F.; CHEKAN, N.T.

Effect of the circumferential speed of the hammer crusher rotor
on the degree of coal fineness and on its operative efficiency.
Koks i khim. no.12:11-13 '63. (MIRA 17:1)

1. Krivorozhskiy metallurgicheskiy zavod.

CHEKAN, O.S.

Frost on the territory of Irkutsk Province. Sib. geog. sbor.
no.2:40-55 '63. (MIRA 16:11)

SOBOLEV, D.P., kandidat tekhnicheskikh nauk; CHEKAN, O.V., inzhener.

High-frequency radio-relay equipment for television transmission.
Vest.sviazi 16 no.5:7-8 My '56. (MLRA 9:8)
(Television broadcasting) (Radio relay systems)

CHEKAN, S. T. Doc Med Sci -- (diss) "Etiology, pathogenesis, clinic, diagnosis, prophylaxis, and treatment of ~~the~~ prolapse of the rectum." Len, 1959. 27 pp
(Len State Order of Lenin Inst for the Advanced Training of Physicians in S. M. Kirov), 200 copies (KL, 41-59, 106)

CHEKANIKHIN, A.

On the stage of experience. Register of members of the primary organization of the All-Union Volunteer Society for Assistance to the Army, Air Force, and Navy. Voen.snan. 29 no.12:6 D '53. (MLRA 7:1)
(Military education)

CHEKANNIKOV, B.A.

Synthesis of a wide-band voltage transformer. Izv. vys. ucheb.
zav.; radiotekh, 7 no. 3:322-331 My-Je '64. (MIRA 17:9)

CHEKANNIKOV, B.A.; DETINKO, V.N.

Voltage transformation with random reactive load. Elektrosviaz'
18 no.10:56-65 0 '64. (MIRA 17:12)

CHEKANNIKOV, N.I., inzh.; PASTUSHENKOV, A.F., inzh.; ZHURAVLEV, V.N., inzh.

Open pit coal mining system without transportation with the use of
power excavators. Ugol' 36 no.2:21-24 F '61. (MIRA 14:2)

1. Trest Cherekhovugol'.

(Strip mining)

(Excavating machinery)

CHEKANORICH, F.A.

USSR/Human and Animal Physiology - Liver.

R-7

Abs Jour : Referat Zhur - Biol., No 16, 1957, 70874

Author : Chekanorich, F.A.

Inst :

Title : Antitoxic Function of Liver in Severe Hemorrhages.

Orig Pub : Novyi Khirurg. arkhiv, 1957, No 1, 20-23

Abstract : No abstract.

Card 1/1

- 33 -

YERMOLAYEV, Yu.; CHEKANOV, A.

Semitrailer for wall-material transportation. Avt. transp.
41 no.12:36-37 D '63. (MIRA 17:1)

BLAGONRAVOV, A.A., akademik, red.; GRIGOR'YAN, A.T., doktor fiz.-mat. nauk, red.; DUSHKIN, L.S., doktor tekhn. nauk, red.; KOSMODEM'YANSKIY, A.A., doktor fiz.-mat. nauk, red.; KOZLOV, S.G., prof., red.[deceased]; SOKOLOVA, S.A., kandd. tekhn. nauk, red.; SOKOL'SKIY, V.N., kand. tekhn.nauk, red.; FEDOROV, A.S., kand. tekhn. nauk, red.; CHEKANOV, A.A., kand. tekhn. nauk, red.; SHUKHARDIN, S.V., kand. tekhn. nauk, red.

[From the history of rocket engineering] Iz istorii raketnoi tekhniki. Moskva, Nauka, 1964. 254 p. (MIRA 17:8)

1. Akademiya nauk SSSR. Institut istorii yestestvoznaniya i tekhniki.

CHEKANOV, A. A.

PA 62T35

USSR/Engineering

Mar 1948

Machinery - Construction

Welding - Electrodes

"New Electrodes Produced by the Central Scientific and Research Institute of Technology and Machine Construction," A. A. Chekanov, Engr, 2 pp

"Vest Mash" No 3

Characteristics and performance data of new electrodes developed by subject Institute to be used for welding. Very fine results have been obtained with these new electrodes in actual operations, and it is expected that they will be very widely used.

62T35

CHEKANOV, A. A.

Svarochnaia tekhnika v SSSR; pod red. G.A. Nikolaeva. Moskva, Mashgis, 1948
150 p. illus., port.
Bibliography: p. 148-149 -150 (49-29330)

Welding technique in the USSR.

DLC: TS227. C542

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of
Congress, 1953

Gos. Nauchn.-Tekhn. Izd-vo Mashinostroy

CHEKANOV, A. A.

Cand Tech Sci

Dissertation: "Welding of Steels at Low Temperatures".

13 June 49

Moscow Order of the Labor Red Banner Higher Technical School
imeni Bauman

SO Vecheryaya Moskva
Sum 71

CHEKANOV, A. A.

PHASE I Treasure Island Bibliographic Report

BOOK

Call No.: AF301725 00000047

Author: CHEKANOV, A.A., Bach. of Eng. Sci.

Full Title: METAL WELDING AT LOW TEMPERATURES

Transliterated Title: Svarka metallov pri niskikh temperaturakh

Publishing Data

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of Machine-Building Literature (Mashgiz)

Date: 1950

No. pp.: 124

No. copies: 6,000

Editorial Staff

Editor: The editorial staff of literature on technology of thermal treatment of metals, Engineer Yu. V. Beyer, manager

Technical Editor: None

Editor-in-Chief: Nikolaev, G.A., Dr. of Eng. Sci., Prof.

Appraiser: Nazarov, S.T., Bach. of Eng. Sci.

Text Data

Coverage: The book concerns metal welding at low temperatures. The effects of these temperatures on properties of metals and welding joints are analyzed. Special processes of welding at temperatures below freezing are described and the results of the investigation of quality of welded joints are given in tables, charts and microphotography.

Purpose: The book is intended for engineers and mechanics working in the field of welding.

1/2

Card 2/2

Call No.: AF301725 00000047

Full Title: METAL WELDING AT LOW TEMPERATURES

Facilities: Institute of Electrical Welding of the Academy of Sciences of the Ukrainian SSR (im. Member of the Academy E.O. Paton).
The chair of N.N. Davidenkov in the Leningrad Polytechnical Institute.
The welding laboratory of the Moscow Higher Technical School im. Bauman.

No. Russian and Slavic References: 60.

Available: A.I.D., Library of Congress

[illegible]

CHEKANOV, A. A.

USSR/ Scientists Bibliography

Card : 1/1

Authors : Chekanov, A. A., Cand. of Techn. Sc.

Title : Nikolay Gavrilovich Slavyanov

Periodical : Nauka i Zhizn'. 5, 39 - 40, May 1954

Abstract : Editorial on the occasion of the 100th birthday of N. G. Slavyanov, Russian engineer and inventor of arc welding. Drawing.

Institution :

Submitted :

CHEKANOV, A.A.

VIRGINSKIY, V.S.; SAVEL'YEV, N.Ya.; SHCHAPOV, N.M., professor, doktor tekhnicheskikh nauk, retsentsent; CHEKANOV, A.A., kandidat tekhnicheskikh nauk, redakter; KONOVALOV, G.M., redaktor; UVAROVA, A.F., tekhnicheskii redakter.

[The construction of hydraulic installation in Altai during the 18th century] Stroitel'stvo vededeistviushchikh ustroistv na Altai v XVIII veka. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1955.
(Altai Territory--Hydraulic engineering--History) (MLRA 8:6)

CHEKANOV, Andrey Aleksandrovich; SHUKHGAL'TER, L. Ya. redaktor;
ZHANENSKIY, A.A., redaktor; KRYNOCHKINA, K.V., tekhnicheskiy
redaktor;

[Modern methods of welding metals] Sovremennye metody svarki
metallov. Moskva, Vses. uchebno-pedagog. izd-vo Trudreservis-
dat, 1955. 101 p. (MLBA 8:8)
(Welding)

CHEKANOV, A.A.

Measuring the moisture content of gas produced by underground coal gasification. Podzem.gaz.ugl. no.1:62-65 '58. (MIRA 11:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gazifikatsii ugley.
(Coal gasification, Underground) (Gas--Testing)

BELYANOVA, Ye.M.; CHEKANOV, A.A.

Device for measuring the moisture content of gas produced underground coal gasification. Podzem.gaz.ugl. no.2:62-64 '59.
(MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gasifikatsii ugley.
(Coal gasification, Underground) (Gas--Testing)

(

30V/25-59-8-25/48

AUTHOR: Chekanov, A.A., Candidate of Technical Sciences
TITLE: Unusual Luminescence. On the 125th Anniversary of
the Death of V.V. Petrov
PERIODICAL: Nauka i zhizn', 1959, Nr 8, pp 62 - 63 (USSR)
ABSTRACT: The author gives a short survey of the work of
the famous Russian electrotechnician and physicist
V.V. Petrov, the discoverer of the phenomenon of
the electric arc. There are 2 photographs.

Card 1/1

CHEKANOVA, A. A.

PHASE I BOOK EXPIRATION SOV/4358

Trud i tekhnika v selskoye (Labor and Engineering in the Seven-Year Plan) Moscow, Profizdat, 1960. 365 p. (Series: Maslova i bilioveka maslova) 10,000 copies printed.

Compiler: S. O. Etylov; Ed.: A. V. Antelov; Tech. Ed.: A. A. Golichenova.

PURPOSE: This book is intended for the general reader.

COVERAGE: The book is a collection of 19 articles dealing with the achievements and progress of the Seven-Year Plan in branches of the Soviet economy and in science. Attention is given to power plants, machine building, building, cybernetics, automation, transportation, prospecting, and production of consumer goods, and the utilization of agriculture, and chemistry. Good suggestions for further progress are made. No personalities are mentioned. There are no references.

PROKOPICH, A. Ye. [Deputy Director, Experimentalnyy Nauchno-Issledovatskiy Institut Mashinostroyeniya (Experimental Scientific Research Institute of Metal-Cutting Machine Tools)] From Automatic Machine Tools to Automatic Production Lines, Shops, and Factories 59

Kobrin, A. Ye. [Doctor of Technical Sciences] Program Control of Machine Tools 119

Solodovnikov, V. Ye. [Doctor of Technical Sciences, Professor] Cybernetics 127

Petrov, A. M. [Corresponding Member, Academy of Sciences USSR] Automation in the Near Future 182

Gambury, D. Yu. [Candidate of Chemistry] Chemistry Today and Tomorrow 166

Pavlov, A. A. [Candidate of Technical Sciences] Foundation of Industry 189

Teklov, V. Ye. [Deputy Director, Moscow Branch of the "Voenfingostroy" Institute] The Seven-Year Plan and the Electrification of the USSR 207

Gambury, Z. P. [Corresponding Member, Academy of Sciences USSR] On Comprehensive Utilization of Fuel 221

Dorlov, M. I. [Chairman, Central Committee, Trade Union of Workers in the Building-Materials Industry] The Construction of a Large Construction Project 252

Gambury, A. A. [Candidate of Technical Sciences] Welding and the Future 267

Gambury, D. I. [Member, Academy of Sciences USSR] What is New in Prospecting for Mineral Resources 290

Petrov, M. A. [Candidate of Technical Sciences, Deputy Chairman, State Scientific and Technical Committee, Council of Ministers of the USSR] New Engineering for the Creation of Plenty 308

Gambury, S. S. [Instructor at the Automation Laboratory, "Voenfingostroy" Nauchno-Issledovatskiy Institut Mashinostroyeniya (Central Scientific Research Institute of the Cotton Industry)] for the Welfare of the People 320

Beyev, B. D. [Director, "Voenfingostroy" Nauchno-Issledovatskiy Institut Mashinostroyeniya (Central Scientific Research Institute of the Cotton Industry)] for the Welfare of the People 325

Karpenko, A. N. [Member, All-Union Academy of Agricultural Sciences] Large-Scale Mechanization of Agriculture 341

Zvonkov, V. V. [Corresponding Member, Academy of Sciences USSR, Honored Scientist and Technologist] A Big Leap in the Book 363

Explanation of Foreign Terms and Difficult Words Occurring in the Book

AVAILABLE: Library of Congress

Card 5/5

AC/AC/AC

10/17/60

PHASE I BOOK EXPLOITATION

SOV/5697

Chekanov, Andrey Aleksandrovich, Candidate of Technical Sciences.

Sovremennyye metody svarki (Modern Welding Methods) Moscow, Proftekhizdat, 1961. 302 p. Errata slip inserted. 31,000 copies printed.

Ed.: M. Ya. Bilinskiy; Tech. Ed.: A. M. Toker.

PURPOSE: This book is intended for junior welding operators. It may also be of interest to senior weldors and workers in the welding industry.

COVERAGE: The book presents information on welding in the Soviet Union and discusses welding practices introduced in non-Soviet countries. Types and methods of welding of metals and plastics are reviewed along with materials used in welding operations. Considerable attention is given to welding equipment which is described in detail and illustrated by photographs. The history of the development of various welding methods is

Card 1/30

2.

Modern Welding Methods

SOV/5697

briefly outlined. G. A. Nikolayev, Corresponding Member of the Academy of Construction and Architecture, reviewed the book, and V. S. Chernyak, Engineer, participated in its technical editing. There are 59 references: 54 Soviet and 5 English.

TABLE OF CONTENTS:

From Academician B. Ye. Paton	3
Introduction	5
Ch. I. Automatic Submerged-Arc Welding	
Essentials and advantages of the method	9
Equipment for automatic submerged-arc welding	12
Fluxes and the wire electrode	28
Development of automatic submerged-arc welding	32

Card 2/10

CHEKANOV, A.A.

Automatic gas sampler. Nauch. trudy VNII Podzemgaza
no.6:62-65 '62. (MIRA 15:11)

1. Laboratoriya kontrolya i avtomatiki Vsesoyuznogo
nauchno-issledovatel'skogo instituta podzemnoy
gazifikatsii ugley.

(Gases--Analysis)

PHASE I BOOK EXPLOITATION

SOV/6507

Chekanov, A. A., Candidate of Technical Sciences

Svarka pri nizkikh temperaturakh (Welding at Low Temperatures)
2nd Ed., Rev. Moscow, Mashgiz, 1962. 191 p. 9500 copies
printed.

Reviewer: M. P. Anuchkin, Candidate of Technical Sciences; Ed.:
V. S. Chernyak, Engineer; Ed. of Publishing House: M. F.
Ragazina; Tech. Ed.: N. F. Demkina; Managing Ed. for Literature on Hot-Working of Metals: L. A. Osipov, Engineer.

PURPOSE: This book is intended for welding engineers and technicians.

COVERAGE: The book summarizes Soviet and non-Soviet practice in metal welding and the use of welded structures at low temperatures. The effect of low temperatures on properties of the base metal and of welds is discussed and the basis for selection of the metal for parts operating at low temperature and factors affecting weld brittleness are analyzed. Special features of welding at low temperatures are outlined. Not personalities are mentioned. There are 198 references, mostly

Card 1/8

CHEKANOV, Andrey Aleksandrovich; BERKOVICH, D.M., red.isd-va;
GUSKOVA, O.M., tekhn. red.; POLENOVA, T.P., tekhn. red.

[History of automatic electric welding] Istoriia avtomati-
cheskoi elektrosvarki. Moskva, Izd-vo AN SSSR, 1963. 156 p.
(MIRA 16:7)

(Electric welding)

CHEKANOV, A.A., kand.tekhn.nauk

Review of the book by I.N.Gerasimenko "Welding two-layer chromium
coated steel." Svar.proisv. no.10:46 0 '64.

(MIRA 1881)

ARTOBOLIVSKIY, I. I., akademik; CHEKANOV, A. A., kand. tekhn. nauk

Beacon light of Russian science; 200th anniversary of M.V. Lomonosov's death. Priroda 54 no.5:10-16 My '65.

(MIRA 18:5)

FRUMIN, Isidor Il'ich; YUZVENKO, Yuriy Arsen'yevich;
LEYNACHUK, Yevgeniy Ivanovich; CHEKANOV, A.A.,
nauchn. red.; GORYUNOVA, I.K., red.; ~~TONOV, V.H.~~, red.

[Technology of mechanized metal deposition] Tekhnolo-
giia mekhanizirovannoi naplavki. Moskva, Vysshaya
shkola, 1964. 303 p. (MIRA 18:1)

BRODSKIY, A.I.; CHEKANOV, A.A.

Reviews. Lit. proizv. no.9:47-48 S '64.

(MIRA 18:10)

CHEKANOV, A. A.

Integrating slotted delivery pipe for measuring gas flow in underground coal gasification. Trudy VNIIPodzemnaya no. 13:87-93 '65.
(MIRA 15:8)

1. Laboratoriya kontrolya i avtomatiki Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

CHEKANOV, A.A., kand.tekhn.nauk

Consultations on letters from readers. Svar. proizv. no.10:48
0 '63. (MIRA 16:11)

1. Institut istorii yestestvoznaniya i tekhniki.

ACCESSION NR: AT4037673

S/2981/64/000/003/0349/0362

AUTHOR: Zakharov, Ye. D.; Zakharov, V. Z.; Kopy*tov, G. A.; Chekanov, A. N.

TITLE: Causes of hot cracking in continuously cast ingots of high strength alloys

SOURCE: Alyuminiyevy*ye splavy*, no. 3, 1964. Deformiruyemy*ye splavy* (Malleable alloys), 349-362

TOPIC TAGS: aluminum alloy, alloy V95, continuously cast ingot, alloy hot cracking, effective crystallization range, ingot cooling, ingot temperature distribution, transition zone width, casting parameter selection, mold height selection, charging hopper width, continuous casting, aluminum alloy casting, alloy crystallization, mold diameter selection

ABSTRACT: The study concerned the selection of optimal conditions for continuous casting of ingots with diameters of 500-520 mm from technically pure alloy V95 (1.66% Cu, 2.13% Mg, 5.8% Zn, 0.42% Mn, 0.14% Cr, 0.18% Si), in order to counteract the alloy's tendency to hot cracking. Three casting variants involved mold diameters of 520 (I), 500 (II) and 520 (III) mm, respectively, mold heights of 200, 400 and 400 mm, hopper diameters of 130, 130 and 320 (circular)mm, casting rates of 18, 25 and 20 mm/min, water pressures of 0.2, 0.5 and 0.5 atm. and a melt temperature of 690C for all variants. Width of the transition zones and ingot temperature distributions were analyzed in terms of cooling curves

Card 1/2

ACCESSION NR: AT4037673

obtained from three thermocouples inserted at the periphery, in the center and at a half-radius point. Consideration was given to the shape of ingot crescents. It was concluded that hot cracking is due to tensile stresses present in the ingot over the effective crystallization range (570-470C in this case), hence minimal width of the transition zone (variant I) throughout the ingot is desirable. The tendency to hot cracking was very slight where this width decreased from the center to the periphery. Variant III provided conditions for the development of intercrystalline cracks in the half-radius zone, while variant II resulted in development of surface cracks and deterioration of mechanical properties. Orig. art. has: 9 graphs and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Card 2/2

CHEKANOV, A.N., inzhener.

Graphic diagram plotting of functions of tension and deformation
intensity on the basis of tension or displacement diagrams. [Trudy]
NVTU no.26:168-172 '53. (MLRA 7:5)
(Plasticity--Graphic methods) (Deformations (Mechanics))

CHEKANOV, A. N. —

"Investigation of the Mechanical Characteristics of Materials Under Torsional Impact." Cand Tech Sci, Moscow Higher Technical School, Moscow, 1954. (RZhMekh, Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No..481, 5 May 55

SOV/124-58-2-2348

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 112 (USSR)

AUTHOR: Chekanov, A. N.

TITLE: Investigation of the Mechanical Torsional-impact Characteristics of Materials (Issledovaniye mekhanicheskikh kharakteristik materialov pri krutyashchem udare)

PERIODICAL: V sb. : Raschety na prochnost' v mashinostroyenii. Moscow, Mashgiz, 1955, pp 206-227

ABSTRACT: A test rig consisting of an impact testing machine and an oscillograph was used to investigate the change of the mechanical torsional-impact characteristics of a material as affected by changes in the strain rate. Graphs are adduced to illustrate the effect of the strain rate on the ultimate strength and the ultimate relative shear deformation of Nr-30 steel; the character of the fracture of OTsS bronze and cast iron is described. The stress-strain relationship, which at elevated strain rates in steel approaches the characteristic of an ideal elastic-plastic substance, assumes the shape of a rectangular pulse, the undistorted transmission of the flat portion of which requires a maximal

Card 1/2

SOV/124-58-2-2348

Investigation of the Mechanical Torsional-impact Characteristics (cont.)

expansion of the amplifier pass band in the low-frequency range. There must also be a sufficiently elevated high-frequency cutoff. Independently of the width of the amplifier pass band it is necessary that the shape of the pulse be compensated in accordance with the transfer characteristic of the amplifier.

M. L. Zaslavskiy

Card 2/2

YAGODKIN, G.I.; CHEKANOV, A.N.; TERPIGOREV, A.Mikh.

Determining mechanical characteristics of coals by samples of arbitrary shape. Ugol' 31 no.3:33-34 Mr '56. (MIRA 9:7)

1.Vsesoyuznyy ugol'nyy institut.
(Coal-Testing)

PERMYAKOV, P.N.; CHEKANOV, A.N.; SHEVALDIN, G.P.

Expediency of the over-all mechanization of stoping operations
in mines under the Tula Economic Council. Ugol' 37 no.8:
36-40 Ag '62. (MIRA 15:9)

1. Tul'skiy kombinat ugol'noy promyshlennosti Podmoskovnogo
basseyna Ministerstva ugol'noy promyshlennosti SSSR.
(Tula Basin—Coal mines and mining) (Coal mining machinery)

CHEKANOV, A.N.

Analytical justification of the plan of an experiment giving a
greater reliability of results. Konstr. ugleiraf. mat. no.1:345-
352 '64. (MIRA 17:11)

ZAKHAROV, Y.O.D. : ZAKHAROV, V.Z.; KOPYTOV, G.A.; CHEKANOV, A.N.

Causes of the appearance of hot cracks during the continuous
casting of highly resistant alloy ingots. Alium. splavy no.3:
349-362 '64. (MIRA 17:6)

CHEKANOV, A.P., mayor meditsinskoy sluzhby

Changes in the refraction in aviation school students. Voen.-med.
shur. no.9:55-56 8 '55. (MLRA 9:9)

(EYE--ACCOMMODATION AND REFRACTION)

(AVIATION MEDICINE)

Chekanov, A.P.

USSR/Human and Animal Physiology - The Sensory Organs.

V-9

Abs Jour : Ref Zhur - Biol., No 4, 1958, 18657
Author : A.P. Chekanov
Inst : -
Title : The Effect of Physical Exertion and Oxygen Hunger on
Night Vision.
Orig Pub : Voen.-med. zh., 1956, No 12, 37-41

Abstract : The rate of dark adaptation at rest in 25 healthy subjects aged 19 to 22 averaged 13 seconds, while in 100 subjects aged 25 to 30 the average was 21 seconds. After physical exertion (30 deep knee-bends with an interval of $1\frac{1}{2}$ seconds) dark adaptation was more rapid by 2 to 10 seconds, while light sensitivity increased by 59.4%. After 25 to 40 minutes under hypoxic conditions in a pressure chamber at an "altitude" of 5000 meters, the rate of dark adaptation and visual acuity with weak light were both reduced. Sensitivity to light decreased by 24.3% on the average.

Card 1/2

USSR/Human and Animal Physiology - The Nervous Organs.

V-9

Abs Jour : Ref Zhur - Biol., No 4, 1958, 18657

The time required for discerning the symbols on a chart increased by 50 to 146%. When O_2 was supplied to the pressure chamber (with 10 subjects) at this altitude, dark adaptation was more rapid by 43%, visual acuity and light sensitivity increased (by 39.4%), and the time for discerning the symbols on a chart was reduced.

Card 2/2

GORBANENKO, A.D., kand.tekhn.nauk; KUZNETSOV, I.G., inzh.; CHEKANOV, G.S.,
inzh.

~~Burking Donets gas coal in shaft-mill furnaces.~~ Elek.sta. 32
no.6:13-15 Je '61. (MIRA 14:8)
(Coal) (Furnaces)

CHEKANOV, I.S.; VOLKOV, K.D.; SLOBODKIN, V.M.

Arrangement for eliminating sticking of loose materials in
a hopper. Gor. zhur. no.5:77 My '64.

(MIRA 17:6)

CHIRKANOV, N.F., veterinarnyy vrach; AVDEYEV, I.M., veterinarnyy vrach.

~~Eliminating pasteurellosis in poultry.~~ Veterinariia 30 no.6:
32-33 Je '53. (MLBA 6:5)

1. Pensenskaya meshsovkhosnaya veterinarnaya bakteriologicheskaya laboratoriya.

YAMKOVOY, G.T., dotsent, kand.tekhn.nauk; ~~CHEKANOV, N.I.~~, dotsent

Ways of improving the performance of hoisting equipment in the
Krivoy Rog Basin. Gor.shur. no.10:45-47 0 '60. (MIRA 13:9)

1. Krivorozhskiy gornordunyy institut.
(Krivoy Rog--Mine hoisting)

POLYAKOV, M.M.; CHEKANOV, N.S.; AGEYEVA, T.F.; GROMOVA, V.A.

Seasonal fluctuation of technological indices for dressing complex
metal ores. TSvet.met. 38 no.3:13-16 Mr '65.

(MIRA 18:6)

CHEKANOV, N.S.; AGEYEVA, T.F.

Lowering degree of sphalerite activation during flotation of secondary enrichment zone copper zinc ores Comments on the article by V.A.Bocharov L.D.Kislyakov and Ye. A. Vershinin. TSvet. met. 38 no.4:90 Ap '65.
(MIRA 18:5)

CHEKANOV, V. (Moskva)

Thyratron device for checking the reliability of contactors.

Radio no.9:44 S '62.

(MIRA 15:9)

(Electric contactors--Testing) (Electronic measurements)

AKKERMAN, A.F.; KOCHETKOV, V.L.; CHEKANOV, V.A.; SUVOROV, V.V.; SHTOL'TS, A.K.

Lifetime of the 4^+ (2310 Kev.) level in Ti^{48} . Zhur. eksp. i
teor. fiz. 45 no.6:1778-1783 D '63. (MIRA 17:2)

1. Institut yadernoy fiziki AN Kazakhskoy SSR.

CHEKANOV. V.D.

Electrical engineering in mining. Izd. 2., perer. i dop. Sverdlovsk, gos. nauch.-
tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1948. 539 p. (49-15817)

TN343.C5 1948

CHEKANOV, V. D.

Laboratory manual for electrical engineering. Sverdlovsk, Gos. nauchno-tekhn,
izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1950. 160 p. (50-39428)

TK147.C5

CHEKANOV, V. D.

"General and Mining Electrical Engineering," Moscow, Metallurgizdat, 1951

CHIEKANDV, Vasilii Demidovich; GOLUBOV, G.V., inzhener, redaktor;
~~LOCHKO~~, Yu.V., redaktor; KOVALENKO, N.I., tekhnicheskii
redaktor.

[Laboratory manual for general and mining electric engineering]
Rukovodstvo k laboratornym rabotam po obshchei i gornoj elektro-
tekhnike. Pod red. G.B.Golubova. Iss.2-oe, perer. i dop.
Sverdlovsk, Gos.nauchno-tekhn.iss-vo lit-ry po chernoi i tsvetnoi
metallurgii Sverdlovskoe otd-nie, 1955. 194 p. [Microfilm]
(Electric engineering) (MLRA 9:1)

CHUKANOV, Vasilii Demidovich; TUBMAN, M.L., red.; TSYMBALIST, N.N., red.
isd-va; ZNF, Ye.M., tekhn. red.

[General and mining electrical engineering] Obshchaya i gornaya
elektrotekhnika. Izd. 2., perer. i dop. Sverdlovsk, Gos. nauchno-
tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlov-
skoe otd-nie, 1958. 512 p. (MIRA 11:9)
(Electric engineering)

BELYKH, Boris Petrovich, dotsent; ~~CHEKALOV, Vasilii Demidovich, inzh.~~;
AKHLYUSTIN, V.K., kand.tekhn.nauk, retsenzent; PETROV, I.P.,
dotsent; KULAKOV, S.N., inzh., red.; LUCHKO, Yu.V., red. izd-va;
ZEF, Ye.M., tekhn.red.

[Electric engineering in mines] Gornala elektrotehnika.
Sverdlovsk, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i
tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1958. 575 p.
(Electricity in mining) (MIRA 12:1)

CHIRKANOV, Vasilii Demidovich; FILATOV, P.D., retsenzent; GOLUBOV, G.V.,
retsenzent; TUBMAN, M.L., red.; KRAPIVIN, B.G., red.izd-vs;
ZEF, Ye.M., tekhn.red.

[Laboratory work-guide for general and electrical engineering
and electrical engineering in mining] Rukovodstvo k laboratornym
rabotam po obshchei i gornoi elektrotekhnike. Izd.3., perer. i
dop. Sverdlovsk, Gos.nauchno-tekhn.izd-vo. lit-ry po chernoi
i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1959. 231 p.
(MIRA 13:1)

(Electric engineering--Laboratory manuals)
(Electricity in mining)

CHEKANOV, V.S.

Fastening end leads of current supply wires of precision instruments. Priborostroenie no.1:21-22 Ja '64. (MIRA 17:2)

3/056/62/043/004/021/061
B102/B180

AUTHORS: Akkerman, A. F., Vil'kovskiy, E. Ya., Kaipov, D. K.,
Chekanov, V. N.

TITLE: Resonance scattering method of measuring the lifetime of the
4⁺ level (1282 kev) of the Cd¹¹⁴ nucleus

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 4(10), 1962, 1268 - 1271

TEXT: The dependence of the resonance scattering cross section on the
source density was investigated with six InCl₃ vapor specimens in quartz
ampoules enclosed in stainless steel containers, with heating from 500 to
800°C to vary the density. Each ampoule had an In¹¹⁴ activity of 10 milli-
curies. That the whole CdCl₃ molecule undergoes the recoil due to gamma
emission in the K-capture, without any destruction of bonds, was confirmed
by a special self-absorption experiment.

$$q = \frac{ndgh^3\sigma\Gamma}{4[\pi(\Delta_n^2 + \Delta_p^2)]^{1/2}E_0^2} \quad (2).$$

The relative weakening of the resonance effect as a result of additional
Card 1/3

Resonance scattering method ...

S/056/62/043/004/021/061
B102/B180

scattering in a thin resonance absorber, was measured. Γ is the level width, which is independent of the state of the source molecule, n the number of atoms per cm^3 Cd, d the mean effective scatterer thickness, Δ_n , Δ_p are the Doppler widths due to the thermal motion of the absorber and scatterer atoms respectively, E_0 is the transition energy and g the spin factor.

From $\Gamma = (4.26 \pm 1.47) \cdot 10^{-8}$ ev the mean lifetime of the 557-kev 2^+ level of the Cd^{114} nucleus was calculated as $\tau_1 = (1.53 \pm 0.53) \cdot 10^{-11}$ sec. τ_2 the lifetime of the 1202-kev 4^+ level was calculated from the experimental curves

$P(E_p) = g[\tau_1, \tau_2, \lambda(\rho, d)]$, where P is the number of γ -quanta per ev near

E_p , λ is the mean free path of the InCl_3 molecules in a medium of density ρ

and collision parameter d : $\tau_2 = (7.5^{+1.2}_{-2.6}) \cdot 10^{-12}$ sec. The theoretical τ_2

values are highly dependent on the model used, but are always below $7.5 \cdot 10^{-12}$

sec. A model which takes account of nucleon pair interaction and collective

interaction with the surface (Phys. Rev. 114, 1116, 1959) gives the best

approach. There are 3 figures.

Card 2/3

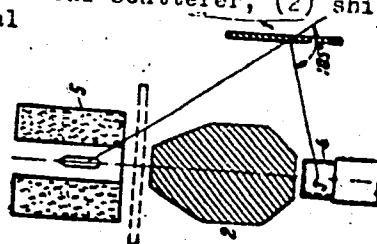
Resonance scattering method ...

3/056/62/043/004/021/061
B102/B180

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR
(Institute of Nuclear Physics of the Academy of Sciences of
the Kazakhskaya SSR)

SUBMITTED: May 29, 1962

Fig. 2. Experimental arrangement. (1) Cylindrical scatterer, (2) shield-
ing lead cone, (3) detector, a NaI(Tl) crystal
with $\Phi\text{EX-11}$ (FEU-11) photomultiplier, whose
pulses were fed to an AZ-1 (AZ-1) single-
channel pulse-height analyzer; (4) 1.5 mm Pb
shield; (5) furnace with source.



ρ , mg/cm^3	3.85	9.57	21.22	24.55	63.71	233.84
σ , mb	246 ± 22.3	232.6 ± 21	224 ± 21.4	210.9 ± 27.6	168 ± 18.5	85.3 ± 19.8

Card 3/3

S/120/63/000/001/012/072
E032/E314

AUTHORS: Batalin, S.S., Kaipov, D.K. and Chekanov, V.N.

TITLE: A fast coincidence circuit for slow scintillators

PERIODICAL: Pribery i tekhnika eksperimenta, no. 1, 1963,
61 - 63

TEXT: The authors report a fast coincidence circuit designed for use with a "fast-slow" system for amplitude-analysis of selected spectral regions. The phosphors are NaI(Tl) and the photomultipliers are $\Phi\gamma$ (FEU)-13. A block diagram of the device is shown in Fig. 1. The fast coincidence circuit is shown in Fig. 2. The values of the components in the lower part of this figure are the same as in the upper part. The overall resolution obtained with Co^{60} γ -rays was found to be 6 ns at 100% efficiency. There are 5 figures.

ASSOCIATION: Institut yadernoy fiziki AN KazSSR (Institute of Nuclear Physics of the AS KazSSR)

SUBMITTED: April 10, 1962

~~SECRET~~

ACCESSION NR: AR4032169

S/0058/64/000/002/V011/V011

SOURCE: Ref. zh. Fiz., Abs. 2V84

AUTHORS: Akkerman, A. F.; Vil'koviskiy, E. Ya.; Chekanov, V. N.

TITLE: Use of the method of resonance scattering of Gamma rays to determine the lifetimes of the second excited states of nuclei

CITED SOURCE: Izv. AN KazSSR. Ser. fiz.-matem. n., vy*p. 2, 1963, Yadern. fiz., 19-30

TOPIC TAGS: second excited state, state lifetime, Gamma resonance scattering, recoil nucleus, recoil nucleus deceleration, differential cross section

TRANSLATION: It is shown in the paper that the lifetimes of the second-excited states of some nuclei can be determined by investigating experimentally the dependence of the cross section of reso-

Card 1/2

ACCESSION NR: AR4032169

nance scattering on the density of the gaseous source, and by comparing the results with the calculations. A procedure is developed for calculating the deceleration of the recoil nuclei in dense gaseous and liquid sources on the basis of the elastic-collision model. The correctness of the elastic-collision model is discussed. The method considered was used to determine the lifetime of the 4^+ level (1282 keV) of Cd^{114} (RZhFiz 1963, 3V90). An analysis of the possibilities of the proposed method shows that by investigating the dependence of the differential cross section of the resonance scattering on the angle between the outgoing cascade γ quanta with the aid of a coincidence circuit it is possible to increase the accuracy with which the lifetime of the second excited state is determined.

DATE ACQ: 31Mar64

SUB CODE: PH

ENCL: 00

Card 2/2

L 17861-63

EWI(m)/BDS AFFTC/ASD

S/0048/63/027/007/0862/0864

ACCESSION NR: AP3003686

AUTHOR: Alckerman, A.F.; Kochetkov, V.L.; Chekanov, V.N.

19

55
54

TITLE: Lifetime of the 880 keV 2^+ state of Ti^{46} /Report of the Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev from 25 January to 2 February 1963/

SOURCE: AN SSSR Izv.Seriya fizicheskaya, v.27, no.7, 1963, 862-864

TOPIC TAGS: lifetime level, resonance scattering, Mossbauer effect, Ti^{46}

ABSTRACT: The lifetime of the 880 keV 2^+ level of Ti^{46} has been measured by the method of Coulomb excitation by G.M.Temmer and N.P.Neydenburg (Phys.Rev.,104, 967 1956) and D.Andreyev, A.Grinberg, K.Erokhina and I.Lemberg (Nuc.Phys.,19, 400, 1960) but the results of these groups are conflicting. Accordingly, in the present work the lifetime of this state was measured by the method of resonance scattering of gamma-rays, which is known to be a reliable procedure for measuring lifetimes and in addition yields supplementary information. Resonance conditions in the rarified gaseous state can be realized if the γ -line is Doppler broadened by a preceding β -transition with end-point energy 360 keV and 1120 keV γ -rays. The source

I-17861-63

ACCESSION NR: AP3003686

was prepared of ScCl_3 obtained by chlorination of Sc_2O_3 , for ScCl_3 is the only scandium compound volatilized at under 1000°C . The measurements were carried out on a two-channel semiautomatic set-up using flat, 30 x 30 cm Ti and Fe scatterers 1.2 and 0.8 cm thick, respectively. The γ -rays were detected by scintillation spectrometers with NaI(Tl) crystals viewed by FEU-11 photomultipliers coupled to single-channel analyzers. The spectrometer resolution was about 12%. Measurements were carried out while heating the source from 20° (solid - no effect) to 1050° (gas - appreciable scattering effect). Calculations based on the experimental microspectrum yield $T = (5.45 \pm 1.45) \times 10^{-12}$ sec, which is in agreement with the result of Andreyev et al. Comparison of this T with the lifetime calculated on the basis of the single-particle model indicates that the 880 keV transition is a speeded up transition with $F = 10$. "In conclusion, we thank S.N. Titov for assistance in the work." Orig.art.has: 1 formula, 3 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 02Aug63

ENCL: 00

SUB CODE: NS

NO REF SOV: 004

OTHER: 103

Card 2/2

L 17860-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3003687

S/0048/53/027/007/0865/0865

AUTHOR: Akkerman, A.F.; Kochetkov, V.L.; Chekanov, V.N.; Oslopovskikh, G.V.
Suvorov, V.A.; Shtol'ts, A.K.

TITLE: Lifetime of the first excited state of Ti^{48} /Report of the Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev from 25 January to 2 February 1963/

SOURCE: AN SSSR Izv. Seriya fizicheskaya, v.27, no.7, 1963, 865

TOPIC TAGS: lifetime level, resonance scattering, Mossbauer effect Ti^{48}

ABSTRACT: The lifetime of the 990 keV 2^+ state of Ti^{48} has been determined by the method of Coulomb excitation as 9.7×10^{-12} sec and 4.2×10^{-12} sec, respectively, by G.M.Temmer and N.P.Heydenburg (Phys.Rev., 104, 967, 1956) and D.Andreyev and others (Nuc.Phys., 19, 400, 1960) and by the method of resonance scattering by V.Knapp (Proc.Phys.Soc., A70, 194, 1957) who obtained $T = 4.2 \times 10^{-12}$ sec. But Knapp did not take into account the possible influence of molecular bonds, although the density of his source was such that this influence could be significant. Hence the authors carried out resonant absorption experiments aimed at determining the lifetime of the 990 keV state of Ti^{48} . The source was V^{48} produced by deuteron

Card 1/2

L 17860-63
ACCESSION NR: AP3003687

bombardment in the internal beam of the Sverdlovsk Polytechnic Institute cyclotron of natural Ti and then converted to VCl_3 . The 400°C reaction temperature employed prevented chlorination of the Sc^{46} , which was also present in the target. Measurements on the double scintillation spectrometer set-up with Ti and Fe scatterers yielded a value of 0.072 ± 0.022 for the attenuation factor R. Calculations based on this value yield $(9.47 \pm 2.89) \times 10^{-5}$ eV for the level width and, finally, $T = (4.92 \pm 1.52) \times 10^{-12}$ sec for the lifetime of the 2^+ state. Orig. art. has: 1 formula.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 02Aug63

ENCL: 00

SUB CODE: NS

NO REF SOV: 002

OTHER: 003

Card 2/2

L 28733-65 EWT(1)/EWT(m) DIAAP

ACCESSION NR: AP5004367

S/0056/65/048/001/0013/0018

AUTHOR: Akkerman, A. F.; Kochetkov, V. L.; Chekanov, V. N.

TITLE: Investigation of slowing down of slow atoms in gases by the gamma-ray resonance scattering method

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 1, 1965, 13-18

TOPIC TAGS: gamma ray resonance, gamma ray scattering, resonance scattering, elastic collision, atom deceleration

ABSTRACT: The cross section for resonant scattering of 325 keV gamma rays by V^{51} nuclei was investigated as a function of the density of a gaseous CrO_2Cl_2 source. The apparatus used is sketched in Fig. 1 of the enclosure. The scatterers were powdered samples pressed in thin-wall conical containers. The conical shape of the scatterer provided an optimum source-scatterer solid angle with minimum amount of scattering material. The mean scattering angle was 135° . A NaI(Tl) crystal together with a photomultiplier was used as a detector. The experimental density

Card 1/3

L 28733-65

ACCESSION NR: AP5004367

dependence agreed satisfactorily with the theoretical prediction based on the elastic-collision model. The collision diameter for a V^{51} atom and a CrO_2Cl_2 molecule is found to be 6.8 Å. Comparison of the present results with those of other resonant experiments indicates that at low recoil-nucleus energies (< 100 eV) (kinetic energy) the elastic collisions are the main factor in the slowing down of the atoms in the gas. "We are sincerely grateful to N. N. Delvagin for very valuable discussions of our results." Orig. art. has: 2 figures, 2 formulas, and 2 tables.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR (Institute of Nuclear Physics, Academy of Sciences Kazakh SSR)

SUBMITTED: 12May64

ENCL: 01

SUB CODE: NP

NR REF SOV: 007

OTHER: 009

Card 2/3

L 28733-65

ACCESSION NR: AP5004367

ENCLOSURE: 01

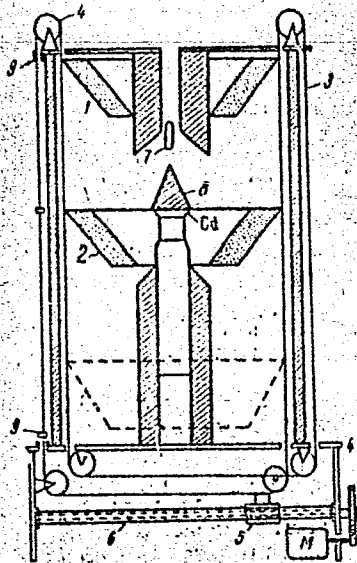


Fig. 1. Diagram of experimental set-up: 1, 2 - Scatterers, 3 - cable, 4 - blocks, 5, 6 - nut and screw, 7 - source, 8 - lead cone, 9 - limit switches, 10 - lead shield, M - motor with gear box

Card 3/3

L 23801-66 EWT(1)/EWT(m)/EPF(n)-2/EWP(j)/T/EWP(k)/ETC(m)-6 WW/GG/RM

ACC NR: AR6005207

SOURCE CODE: UR/0058/65/000/009/EO07/EO07

SOURCE: Ref. zh. Fizika, Abs. 9E67

AUTHORS: Chekanov, V. V.

TITLE: On the kinetics of boiling-up of a pure liquid under the influence of sound

REF SOURCE: Uch. zap. Kabardino-Balkarsk. un-t. Ser. fiz.-matem., vyp. 22, 1964, 275-277

TOPIC TAGS: phase transition, acoustic effect, boiling, nucleate boiling, ultrasonic effect

TRANSLATION: Starting from Frenkel's theory of heterophase fluctuations, the author investigates theoretically the probability of obtaining a stable nucleus of a new phase in a substance situated in an external ultrasonic field.^{2/} It is shown that this probability increases if $\Delta T_1 > \Delta T_2$, where ΔT_1 is the degree of superheat of the liquid and ΔT_2 is the amplitude of the deviation of the temperature of the nucleus from the temperature of the homogeneous phase under the influence of the ultrasonic waves. V. Z.

SUB CODE: 20

Card 1/1

L 10757-67 EMT(1)/EMT(m)/EMT(k)

ACC NR: AR6016454 (N) SOURCE CODE: UR/0124/65/000/012/B036/B036 27
AUTHOR: Nesis, Ye. I.; Chekanov, V. V.
TITLE: Effect of ultrasound on the growth of heterophase fluctuations in a liquid
SOURCE: Ref. zh. Mekhanika, Abs. 12B244
REF SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 20. M., 1964, 11-14
TOPIC TAGS: vapor condensation, ultrasonic wave, heat transfer rate
ABSTRACT: The authors consider the behavior of vapor bubbles in a liquid in the field of an ultrasonic wave with regard to heat exchange between liquid and bubble. If it is assumed that the time required for carrying off the heat released during condensation determines the rate of collapse of a bubble, then a bubble collapses at a slower rate than it grows. This results in growth of vapor bubbles which are below critical size. V. Akulichev. [Translation of abstract]
SUB CODE: 20

Card 1/1

ACCESSION NR: AT4029926

8/3087/62/001/000/0139/0145

AUTHOR: Chekanova, A. A.; Epshteyn, V. G.; Murasheva, L. A.

TITLE: The use of butadiene and monochlorostyrene resins -- copolymers as active fillers of rubber mixtures

SOURCE: Yaroslavl'. Tekhnologicheskii institut. Khimiya i khimicheskaya tekhnologiya, vol. 1, 1962, 139-145

TOPIC TAGS: butadiene, monochlorostyrene, resin, copolymer, rubber mixture, active filler, vulcanization, caoutchouc, emulsion polymerization, BSS-85 resin

ABSTRACT: The authors investigated the increase of temperature resistance of vulcanizers by studying resins -- copolymers of butadiene with monochlorostyrene. The results of the investigation and the properties of various resins and copolymers are presented in tables and graphs. Butadiene chlorostyrene resins with different monomer contents were synthesized by the emulsion polymerization method. The kinetic curves of polymerization were recorded; it is shown that by increasing chlorostyrene in the mixture, the velocity of polymerization increases. The strengthening effect of the obtained resin in the rubber mixtures based on SKB-30AK caoutchouc was studied and compared to the BSS-85 resin. It was shown that the optimal butadiene

Card 1/2

ACCESSION NR: AT4029926

chlorostyrene resin content was 50 parts by wt/100 parts by weight of caoutchouc. The vulcanisers which contained butadiene chlorostyrene resin were characterized by high moduli, resistant to wear and tear. Butadiene chlorostyrene resins increase the temperature resistance of vulcanisers which is caused by the existence of strong intermolecular reaction in the resin. Orig. art. has: 2 tables and 2 figures

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 29Apr64

ENCL: 00

SUB CODE: CH

NO REF SOV: 002

OTHER: 000

Card 2/2

15.9201
S/081/62/000/005/108/112
B168/B101

AUTHORS: Chekanova, A. A., Epshteyn, V. G., Tsaylingol'd, V. L.,
Nikitina, N. P.

TITLE: The use of resins - copolymers of methyl vinyl pyridine - as
active fillers for rubber compounds

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 647, abstract
5P314 (Uch. zap. Yaroslavsk. tekhnol. in-ta, v. 6, 1961,
101-108)

TEXT: Emulsions of butadiene vinyl pyridine resins containing 60, 70, and
85 % methyl vinyl pyridine (I) were introduced into butadiene/styrene
latex (KC-3OAPK (SKS-3OARK). The compound was coagulated and the coagulum
was vulcanized in the presence of sulfur and of accelerators containing no
carbon black. In the case of the resin containing 85 % I, sulfur additions
of up to 15 parts by weight are required. "Vultexes" - latexes after
vulcanization of resins in globules with the aid of sulfur and
accelerators - were also obtained. The use of resins in the form of
latex or "vultex" increases the moduli and also the tear and breaking

Card 1/2

The use of resins - copolymers...

S/081/62/000/005/108/112
B168/B101

strength - this latter effect increasing with the content of I. I-resins impart to the vulcanized rubber a higher temperature resistance than do resins with a high styrene content. Temperature resistance increases with the content of I. The I-resin globule is assumed to contain a large number of sulfur links, which reduce the pliability of the chain, even at raised temperatures, and thereby considerably increase the temperature resistance of the vulcanized rubber. [Abstracter's note: Complete translation.]

Card 2/2

VIRNIK, D.I., starshiy nauchnyy sotrudnik; KHAR'KOVA, A.G., mladshiy nauchnyy sotrudnik; SHAKHNAZAROVA, M.Sh., mladshiy nauchnyy sotrudnik; VLASOV, A.P., inzh.; ROSTOVTSEVA, V.I., inzh.; CHEKANOVA, G.V., inzh.; Prinimali uchastiye: ARTEMOVA, N.N.; TSYPINA, N.D.; KUST, Ye.F.

Preparation of gelatin from raw materials processed with the acid method. Trudy VNIIMP no.13:52-63 '62. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti (for Khar'kova, Shakhnazarova, Artemova).
2. Moskovskiy zhelatinovyy zavod (for Vlasov, Rostovtseva, Chekanova, Tsypina, Kust.).